REMARKS/ARGUMENTS

Claims 4-5 and 10-11 have been canceled, and claims 12-13 added. Accordingly, claims 1-3, 6-9 and 12-13 are now pending.

Claims 2 and 7 have been amended to address the rejection under 35 U.S.C. §112. The pending claims are now believed to be in proper form.

The claims had previously been rejected over the prior art as follows:

1. All but claim 9 were rejected under 35 U.S.C. §102(b) as anticipated by Andersen et al. U.S. Patent No. 4,923,665.
2. Claims 2 and 7 were rejected under 35 U.S.C. §103(a) as unpatentable over Andersen et al.
3. Claim 9 was rejected under 35 U.S.C. §103(a) as unpatentable over Andersen et al. in view of one of Hornaman et al. U.S. Patent No. 5,573,036, Takagi U.S. Patent No. 4,560,413, or Colombet et al. U.S. Patent No. 5,578,668.

Applicant respectfully asserts that the above rejections are not proper for the claims as currently pending.

Specifically, as amended herein, claim 1 now recites that the molded product is cured "by any one of a steam curing process and an autoclaving curing process." The molding of hydraulic composition, which contains the workability improver and has been cured "by any one of a steam curing process and an autoclaving curing process," has been found to have a

high crystallinity, increases adhesion between the cement hydrate and the workability improver and contains much less water. As a result, the molding of hydraulic composition as now recited in claim 1 has a remarkably improved heat resistance (such as a solder heat resistance: 260-280°C), regardless of addition of a workability improver. By contrast, where a conventional molding of hydraulic composition prepared by adding a workability improver and curing the resultant is heated, chipping occurs in the molding at about 200°C, resulting in disruption of the molding, presumably due to low crystallinity of cement hydrate, rapid release of water from the inside of the molding or the like.

Claim 1 as amended herein also now recites that a "catalyst for electroless plating [is applied] to the surface of the cured product" and that "an electroless-plated coating" is then formed thereon, and the material applied on the cured product specifically being "a metallic coating [provided] by an electroplating process". Reference to "a metallic compound coating" has been deleted from the claim. This permits the performance of electroplating even though a molding of hydraulic composition is nonconductor and not typically capable of being subjected to electroplating. As a result, an advantageous bond strength may be obtained and a metallic coating having a given thickness may be formed according to the present invention.

If a conventional cement molding were subjected to a chemical etching process for the purpose of applying catalyst for electroless plating,

erosion of cement components may be caused. By contrast, the use of a workability improver in the molding of hydraulic compositions according to the present invention results in a chemical resistance which can reduce the erosion of the cement components which would result from a chemical etching process. Moreover, a metallic coating is more tightly bonded to a body portion of the molding of hydraulic composition according to the present invention, resulting in a very high surface hardness. These effects are shown in embodiments 1 and 2 of the present disclosure (see particularly Table I).

The cited references neither teach nor suggest a cured state resulting from "any one of a steam curing process and an autoclaving curing process", as well as neither teaching nor suggesting that the above effects are produced by the application of "any one of a steam curing process and an autoclaving curing process" to a molding of hydraulic composition that contains the workability improver.

Further, the metallic coating forming process disclosed in Andersen et al. is completely different from the metallic coating forming process of the present invention. Moreover, Andersen et al. neither teaches nor suggests improvement in bond strength of a metallic coating resulting from the addition of a workability improver.

Accordingly, claim 1 as amended is submitted to be allowable. Claims 2-3, which each depend from claim 1, are similarly submitted to be allowable.

Amended independent claim 6 also now recites that the extruded product is cured "by any one of a steam curing process and an autoclaving curing process", that a "catalyst for electroless plating [is applied] to the surface of the cured product", and that "an electroless-plated coating" is then formed thereon. Claim 6 also recites that the material applied on the cured product is "a metallic coating [provided] by an electroplating process".

As discussed above regarding these limitations in claim 1, this molding of hydraulic composition has a remarkably improved heat resistance, regardless of addition of a workability improver. Further, this permits the performance of electroplating even though a molding of hydraulic composition is nonconductor and not typically capable of being subjected to electroplating and, as a result, an advantageous bond strength may be obtained and a metallic coating having a given thickness may be formed.

The cited references neither teach nor suggest these claim 6 limitations. Accordingly, claim 6 as amended is submitted to be allowable. Claims 7-9, which each depend from claim 6, are similarly submitted to be allowable.

New independent claim 12 recites, *inter alia* , a molding of hydraulic composition prepared by curing the molded product "by any one of a steam curing process and an autoclaving curing process", thereby providing remarkably improved heat resistance for the reasons discussed above with respect to claim 1. Claim 12 further recites, *inter alia*, that a metallic

compound coating is provided on the cured product "by a spraying process". The bond strength between a conventional cement molding and a metallic compound coaling provided by a spraying process is not particularly high. However, in accordance with the invention recited in claim 12, the molding of hydraulic composition, which contains a workability improver, has a dense surface that allows the metallic compound coating to be tightly bonded to a body portion of the molding, resulting in a very high surface hardness. This effect is shown in embodiment 3 of the description of the present application (see particularly Table 1).

The cited references neither teach nor suggest curing processes such as a steam curing process or an autoclaving curing process. Therefore, the remarkable effect as mentioned above resulting from the application of "any one of a steam curing process and an autoclaving curing process" to a molding of hydraulic composition containing the workability improver is neither taught nor suggested in those references. Further, as previously discussed, the forming process of a metallic coating as disclosed in Andersen et al. is completely different from the forming process of the present invention, and Andersen et al. neither teaches nor suggests improvement in bond strength of a metallic coating resulting from the addition of a workability improver.

Accordingly, claim 12 as presented herein is submitted to be allowable.

New independent claim 13 is similar to claim 12, reciting molding of hydraulic composition prepared by curing the molded product "by any one of a steam curing process and an autoclaving curing process" and that a metallic compound coating is provided on the cured product "by a spraying process". Claim 13 differs from claim 12 (as claim 6 differs from claim 1) by reciting a viscosity improver and extruding the hydraulic composition rather than press-molding. Claim 13 should, therefore, be allowable for the same reasons as set forth above with respect to claim 12.

For the above reasons, all of pending claims 1-3, 6-9 and 12-13 are believed to be allowable. Early notification to that effect is respectfully requested.

Respectfully submitted,

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